

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.:

10/056,154

Confirmation No.:

2279

First-named Inventor:

Fortin, Vincent

Filing Date:

23 January 2002

Group Art Unit:

2823

Examiner:

Lee, Hsien Ming

Attorney Docket No.:

M-12524 US

Title:

Cobalt Silicide Fabrication Using Protective Titanium

Assignec(s):

Mosel Vitelie, Inc.

DECLARATION OF KUEI-CHANG TSAI

I, KUEI-CHANG TSAI, declare as follows:

- 1. I am one of the inventors of the invention described and claimed in the above patent application.
- 2. The background section of the application's specification describes, on page 1, a conventional cobalt silicide fabrication process in which titanium layer 130 is "sputtered" on cobalt layer 120. In so describing titanium layer 130 as being "sputtered", I meant that titanium layer 130 is formed by non-ionized sputter deposition, a type of nonionized physical vapor deposition. On information and belief, co-inventor Vincent Fortin also meant that titanium layer 130 is formed by non-ionized sputter deposition in the cobalt silicide fabrication process described in the background section of the specification. In particular, the sputter deposition of titanium layer 130 as described in the specification's background section is not ionized physical vapor deposition or a type of ionized physical vapor deposition.

I further declare that all statements made herein of my own knowledge are true, that all statements made herein on information and belief are believed to be true, that all statements made herein are made with the knowledge that whoever, in any matter within the jurisdiction of the U.S. Patent and Trademark Office, knowingly and willfully falsifies, conceals, or covers up by any trick, scheme, or device a material fact, or makes any false,

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document knowing the same to contain any false, fictitious or fraudulent statement or entry,

fictitious or fraudulent statements or representations, or makes or uses any false writing or

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shall be subject to the penalties including fine or imprisonment or both as set forth under 18 U.S.C. 1001, and that violations of this paragraph may jeopardize the validity of the application or this document, or the validity or enforceability of any patent, trademark registration, or certificate resulting therefrom.

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6/3/05

Kuei-Chang Tsai

Date

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Cobalt Silicide Fabrication Using Protective Titanium

Assignee(s):

Mosel Vitelic, Inc.

DECLARATION OF WEE-CHEN GAN

I, WEE-CHEN GAN, declare as follows:

- 1. I am a semiconductor process engineer employed Mosel Vitelic Corporation ("MVC"), an affiliate of the assignee of the above patent application. I have worked as a semiconductor process engineer for eight years, including the last four years at MVC.
 - 2. I have a bachelor's degree in electrical engineering.
- 3. I have reviewed the background section of the specification of the above application.
- 4. The specification's background section describes, on page 1, a conventional cobalt silicide fabrication process in which titanium layer 130 is "sputtered" on cobalt layer 120.
- 5. Nowhere does the specification's background section indicate that a substantial portion of the sputter deposited titanium particles are in ionic form as they travel from the titanium target to cobalt layer 120. In light of this and in the absence of any other information which might suggest that a substantial portion of the titanium particles are ionized in traveling from the titanium target to cobalt layer 120, it is clear to me that the titanium sputtering in the specification's background section is non-ionized sputter deposition, a type of non-ionized physical vapor deposition. The sputter deposition of titanium layer 130 in the specification's background section is not ionized physical vapor deposition or a type of ionized physical vapor deposition.

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I further declare that all statements made herein of my own knowledge are true, that all statements made herein on information and belief are believed to be true, that all statements made herein are made with the knowledge that whoever, in any matter within the jurisdiction of the U.S. Patent and Trademark Office, knowingly and willfully falsifies, conceals, or covers up by any trick, scheme, or device a material fact, or makes any false, fictitious or fraudulent statements or representations, or makes or uses any false writing or document knowing the same to contain any false, fictitious or fraudulent statement or entry, shall be subject to the penalties including fine or imprisonment or both as set forth under 18 U.S.C. 1001, and that violations of this paragraph may jeopardize the validity of the application or this document, or the validity or enforceability of any patent, trademark registration, or certificate resulting therefrom.

Wee-Chen Gan

6/3/05

Date

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